

**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP) RENEWAL
OFFICE OF AIR QUALITY**

**Mead Johnson & Company
State Highway 62 East
Mt. Vernon, Indiana 47620**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F129-13970-00021	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: February 20, 2002 Expiration Date: February 20, 2007

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary pharmaceutical packaging and research and development source.

Authorized Individual:	Thomas R. Ward
Source Address:	State Highway 62 East, Mt. Vernon, Indiana, 47620
Mailing Address:	2400 West Lloyd Expressway, Evansville, Indiana 47721
SIC Code:	2834
Source Location Status:	Posey
County Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) Two (2) natural gas fired boilers installed in 1970, identified as S-1 and S-2, each with a maximum heat input rate of 30.64 million (MM) British thermal units (Btu) per hour, and exhausting through stacks S-1 and S-2, respectively. Boilers S-1 and S-2 use No. 2 fuel oil as back-up fuel.
- (b) One (1) natural gas fired incinerator, installed in 1979, and identified as S-4, with maximum heat input capacity of 1.5 MMBtu/hr and a maximum process capacity of 250 lbs/hr, and exhausting through stack S-4.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (1) The following VOC storage containers:
 - (a) One (1) 1,130 gallon aboveground storage tank containing gasoline.
 - (b) One (1) 1,130 gallon aboveground storage tank containing diesel fuel.
 - (c) One (1) 300 gallon aboveground storage tank containing diesel fuel.
 - (d) One (1) 250 gallon aboveground storage tank containing diesel fuel.

- (2) Other categories with emissions below insignificant thresholds:
- (a) Two (2) dry material mixing units identified as S-9 and S-10, each controlled by a baghouse for PM control, identified as DC-1, and exhausting through one (1) stack SV-9.
 - (b) Two (2) dry weighing units identified as S-11 (1107) and S-12 (1108), each controlled by a baghouse for PM control, identified as DC-1, and exhausting through one (1) stack SV-9.
 - (c) Four (4) core pressing units identified as S-16 (1106), S-13 (1109), S-14 (1111), and S-15 (1113), each controlled by a baghouse for PM control, identified as DC-2, and exhausting through one (1) stack SV-10.
 - (d) Three (3) core pressing units identified as S-17 (1122), S-18 (1121), and S-19 (1120), each controlled by a baghouse for PM control, identified as DC-1, and exhausting through one (1) stack SV-9.
 - (e) One (1) coating unit for dry tablets from facilities S-16 (1106), S-13 (1109), S-14 (1111), and S-15 (1113), identified as S-20 (1112), utilizing two (2) coating pans, controlled by a baghouse for PM control, identified as DC-12001 and DC-12201, and exhausting through two (2) stacks SV-11 and SV-12.
 - (f) One (1) coating unit for dry tablets from facilities S-17 (1122), S-18 (1121), and S-19 (1120), identified as S-21 (1125), utilizing one (1) coating pan, controlled by a baghouse for PM control, identified as DC-20601, and exhausting through one (1) stack SV-13.
 - (g) One (1) coating unit for dry tablets from facilities S-17 (1122), S-18 (1121), and S-19 (1120), identified as S-22 (1124), utilizing one (1) coating pan, controlled by a baghouse for PM control, identified as DC-20801, and exhausting through one (1) stack SV-14.
 - (h) One (1) coating unit for dry tablets from facilities S-17 (1122), S-18 (1121), and S-19 (1120), identified as S-23 (1117), utilizing one (1) coating pan, controlled by a baghouse for PM control, identified as DC-21001, and exhausting through one (1) stack SV-15.
 - (i) One (1) coating unit for dry tablets from facilities S-17 (1122), S-18 (1121), and S-19 (1120), identified as S-24 (1119), utilizing one (1) coating pan, controlled by a baghouse for PM control, identified as DC-8, and exhausting through one (1) stack SV-16.
 - (j) One (1) coating unit for dry tablets from facilities S-17 (1122), S-18 (1121), and S-19 (1120), identified as S-25 (1123), utilizing one (1) coating pan, controlled by a baghouse for PM control, identified as DC-9, and exhausting through one (1) stack SV-17.
 - (k) Cold solvent cleaning station (2 square feet).
 - (l) Cold solvent cleaning station (3.75 square feet).

- (m) Light vehicle traffic on paved roads.
- (n) Powder mixing cabinets.
- (o) Pharmaceutical packaging lines with rotoclone.
- (p) Research and development operations.
- (q) One granulator unit for wet granulation.
- (3) Emergency generators as follows:
Two (2) emergency diesel powered generators, identified as S-3 and S-7, with heat input capacities of 4.4 and 0.7 MMBtu/hr, and exhausting through stacks S-3 and S-7, respectively.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deletedby this permit.
- (b) All previous registrations and permits are superseded by this permit.

SECTION B GENERAL CONDITIONS

B.1 Permit No Defense [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

B.2 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.

B.3 Permit Term [326 IAC 2-8-4(2)]

This permit is issued for a fixed term of five (5) years from the original date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.

B.4 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.6 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.8 Duty to Supplement and Provide Information [326 IAC 2-8-3(f)] [326 IAC 2-8-4(5)(E)] [326 IAC 2-8-5(a)(4)]

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality.[326 IAC 2-8-4(5)(E)]
- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; and
 - (3) Denial of a permit renewal application.
- (b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (c) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in condition B, Emergency Provisions.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts as specified in Sections D of this permit, IDEM, OAQ, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs), including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967

Failure to notify IDEM, OAQ, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]

- (1) A timely renewal application is one that is:

- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

- (2) If IDEM, OAQ upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

- (c) Right to Operate After Application for Renewal [326 IAC 2-8-9]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as needed to process the application.

B.18 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any approval required by 326 IAC 2-8-11.1 has been obtained;
 - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and
 - (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).
- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

B.20 Permit Revision Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also satisfy the requirements of 326 IAC 2-2;
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.6 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Indiana Accredited Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-8-4(3)]

C.9 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented upon issuance of this permit. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

Unless otherwise specified in the approval for the new emissions unit, compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.

C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (b) Whenever a condition in this permit requires the measurement of a temperature, flow rate, or pH level, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68; or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.15 Compliance Response Plan - Preparation, Implementation, Records, and Reports
[326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, OAQ upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and is comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.
 - (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
 - (3) An automatic measurement was taken when the process was not operating.

- (4) The process has already returned or is returning to operating within “normal” parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-8-12 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

**C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4]
[326 IAC 2-8-5]**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the “authorized individual” as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.17 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.18 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, any quarterly report required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. The report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) Reporting periods are based on calendar years.

Stratospheric Ozone Protection

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (a) Two (2) natural gas fired boilers installed in 1970, identified as S-1 and S-2, each with a maximum heat input rate of 30.64 million (MM) British thermal units (Btu) per hour, and exhausting through stacks S-1 and S-2, respectively. Boilers S-1 and S-2 use No. 2 fuel oil as back-up fuel.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.1.1 Particulate Matter Limitation (PM) [326 IAC 6-2-3]

Pursuant to 326 IAC 6-2-3 (a) (Particulate emission limitations for sources of indirect heating: emission limitations for facilities specified in 326 IAC 6-2-1 (b)), particulate emissions from Boilers S-1 and S-2, which were existing and in operation on or before June 8, 1972, shall be limited to 0.6 pounds of particulate matter per million British thermal units heat input.

D.1.2 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1] [326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations) the SO₂ emissions from the boilers S-1 and S-2, each rated at 30.64 MMBtu/hr, shall not exceed five tenths (0.5) pounds per MMBtu heat input. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a thirty (30) day rolling weighted average.

D.1.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities.

Compliance Determination Requirements

D.1.4 Sulfur Dioxide Emissions and Sulfur Content

Compliance shall be determined utilizing one of the following options.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million Btu heat input by:
- (1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification; or
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the boilers S-1 and S-2, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.5 Visible Emissions Notations

- (a) Visible emission notations of the boilers S-1 and S-2 stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere and while combusting fuel oil. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.6 Record Keeping Requirements

- (a) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (6) below.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;
 - (3) A certification, signed by the owner or operator, that the records of the fuel supplier certifications represent all of the fuel combusted during the period, the natural gas fired boiler certification does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1); and
- If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:
- (4) Fuel supplier certifications.
 - (5) The name of the fuel supplier; and
 - (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

- (b) To document compliance with Condition D.1.5, the Permittee shall maintain records of visible emission notations of the boiler S-1 and boiler S-2 stack exhaust while combusting fuel oil.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.7 Reporting Requirements

The natural gas fired boiler certification shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

- (a) One (1) natural gas fired incinerator, installed in 1979, and identified as S-4, with maximum heat input capacity of 1.5 MMBtu/hr and a maximum process capacity of 250 lbs/hr, and exhausting through stack S-4.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.2.1 FESOP Hazardous Air Pollutant Limit [326 IAC 2-8]

Pursuant to 326 IAC 2-8, the incinerator charge capacity shall not exceed 537.29 tons per twelve (12) consecutive month period. Compliance with this production limit shall limit source wide single HAP (as Hydrochloric acid, HCl) and total HAPs emissions to less than 10 and 25 tons per twelve (12) consecutive month period, respectively. Therefore the requirements of 326 IAC 2-7 do not apply.

D.2.2 Solid Waste Incinerator [326 IAC 4-2-2]

Pursuant to 326 IAC 4-2-2 (Incinerators), this solid waste natural gas incinerator, rated at 250 pounds per hour shall:

- (a) Consist of primary and secondary chambers or the equivalent.
- (b) Be equipped with a primary burner unless burning wood products.
- (c) Comply with 326 IAC 5-1 (Opacity limitations).
- (d) Be maintained properly as specified by the manufacturer and approved by IDEM.
- (e) Be operated according to the manufacturer's recommendation and only burn waste approved by IDEM.
- (f) Comply with other state and/or local rules or ordinances regarding installation and operation of incinerators.
- (g) Be operated so that emissions of hazardous material including, but not limited to, viable pathogenic bacteria, dangerous chemical or gases, or noxious odors are prevented.
- (h) Not create a nuisance or a fire hazard.
- (i) Not emit particulate matter (PM) in excess of 0.3 pounds per 1000 pounds of dry exhaust gas corrected to fifty percent (50%) excess air.

The operation of this incinerator shall be terminated immediately upon noncompliance with any of the above mentioned requirements.

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.2.3 Record Keeping Requirements

To document compliance with Condition D.2.1, the Permittee shall maintain records of the quantities and types of wastes burned in the incinerator (charge rates). The records shall be complete and sufficient to establish compliance with HAPs and particulate matter limitations set forth in this permit.

D.2.4 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.3

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)] Insignificant Activities

- (1) Other categories with emissions below insignificant thresholds:
- (a) Two (2) dry material mixing units identified as S-9 and S-10, each controlled by a baghouse for PM control, identified as DC-1, and exhausting through one (1) stack SV-9.
 - (b) Two (2) dry weighing units identified as S-11 (1107) and S-12 (1108), each controlled by a baghouse for PM control, identified as DC-1, and exhausting through one (1) stack SV-9.
 - (c) Four (4) core pressing units identified as S-16 (1106), S-13 (1109), S-14 (1111), and S-15 (1113), each controlled by a baghouse for PM control, identified as DC-2, and exhausting through one (1) stack SV-10.
 - (d) Three (3) core pressing units identified as S-17 (1122), S-18 (1121), and S-19 (1120), each controlled by a baghouse for PM control, identified as DC-1, and exhausting through one (1) stack SV-9.
 - (e) One (1) coating unit for dry tablets from facilities S-16 (1106), S-13 (1109), S-14 (1111), and S-15 (1113), identified as S-20 (1112), utilizing two (2) coating pans, controlled by a baghouse for PM control, identified as DC-12001 and DC-12201, and exhausting through two (2) stacks SV-11 and SV-12.
 - (f) One (1) coating unit for dry tablets from facilities S-17 (1122), S-18 (1121), and S-19 (1120), identified as S-21 (1125), utilizing one (1) coating pan, controlled by a baghouse for PM control, identified as DC-20601, and exhausting through one (1) stack SV-13.
 - (g) One (1) coating unit for dry tablets from facilities S-17 (1122), S-18 (1121), and S-19 (1120), identified as S-22 (1124), utilizing one (1) coating pan, controlled by a baghouse for PM control, identified as DC-20801, and exhausting through one (1) stack SV-14.
 - (h) One (1) coating unit for dry tablets from facilities S-17 (1122), S-18 (1121), and S-19 (1120), identified as S-23 (1117), utilizing one (1) coating pan, controlled by a baghouse for PM control, identified as DC-21001, and exhausting through one (1) stack SV-15.
 - (i) One (1) coating unit for dry tablets from facilities S-17 (1122), S-18 (1121), and S-19 (1120), identified as S-24 (1119), utilizing one (1) coating pan, controlled by a baghouse for PM control, identified as DC-8, and exhausting through one (1) stack SV-16.
 - (j) One (1) coating unit for dry tablets from facilities S-17 (1122), S-18 (1121), and S-19 (1120), identified as S-25 (1123), utilizing one (1) coating pan, controlled by a baghouse for PM control, identified as DC-9, and exhausting through one (1) stack SV-17.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-4(1)]

D.3.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Process Operations), particulate emissions from the following facilities shall be limited as follows:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Emission Unit	Process Weight Rate (lb/hr)	Allowable PM Emissions (326 IAC 6-3-2) (lb/hr)
S-9 (Pharmacy A)	693	2.01
S-10 (Pharmacy B)	926	2.45
S-11 (Weigh room 1107)	10**	0.551
S-12 (Weigh room 1108)	45.3**	0.551
S-13 (Press room 1109) S-14 (Press room 1111) S-15 (Press room 1113) S-16 (Press room 1106)	901*	2.40
S-17 (Press room 1122)	261	1.04
S-18 (Press room 1121)	235	0.97
S-19 (Press room 1120)	179	0.81
S-20 (Coating room 1112)	874	2.35
S-21 (Coating room 1125) S-22 (Coating room 1124) S-23 (Coating room 1117) S-24 (Coating room 1119) S-25 (Coating room 1123)	654*	1.94

* Reflects the one combined process weight rate for all the listed units.

** Particulate matter emissions for processes with process weight rate of equal to or less than 100 lb/hr are limited to 0.551 lbs/hr

Compliance Determination Requirements

D.3.2 Particulate Matter (PM)

The Baghouses (DC-1, DC-2, DC-12001, DC-12201, DC-20601, DC-20801, DC-21001, DC-8, and DC-9) for PM control shall be in operation at all times when the mixing, weighing, pressing and coating facilities are in operation, in order to comply with the requirements of 326 IAC 6-3-2.

Compliance Monitoring Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

There are no Compliance Monitoring Requirements applicable to these emission units.

Record Keeping and Reporting Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

There are no Record Keeping and Reporting Requirements applicable to these emission units.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: Mead Johnson & Company
Source Address: State Highway 62 East, Mt. Vernon, Indiana 47620
Mailing Address: 2400 West Lloyd Expressway, Evansville, Indiana 47721
FESOP No.: F129-13970-00021

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Affidavit (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT**

Source Name: Mead Johnson & Company
Source Address: State Highway 62 East, Mt. Vernon, Indiana 47620
Mailing Address: 2400 West Lloyd Expressway, Evansville, Indiana 47721
FESOP No.: F129-13970-00021

This form consists of 2 pages

Page 1 of 2

9 This is an emergency as defined in 326 IAC 2-7-1(12)
 CThe Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
 CThe Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: Mead Johnson & Company
Source Address: State Highway 62 East, Mt. Vernon, Indiana 47620
Mailing Address: 2400 West Lloyd Expressway, Evansville, Indiana 47721
FESOP No.: F129-13970-00021

**This certification shall be included when submitting monitoring, testing reports/results
or other documents as required by this permit.**

Report period

Beginning: _____

Ending: _____

Boiler Affected

Alternate Fuel

Days burning alternate fuel
From To

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH**

FESOP Quarterly Report

Source Name: Mead Johnson & Company
Source Address: State Highway 62 East, Mt. Vernon, Indiana 47620
Mailing Address: 2400 West Lloyd Expressway, Evansville, Indiana 47721
FESOP No.: F129-13970-00021
Facility: Incinerator (S-4)
Parameter: Incinerator charge (as surrogate for total HAPs and worst case single HAP)
Limit: Charge limit of 537.29 tons per 12 consecutive month period

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.

Deviation has been reported on: _____

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE BRANCH**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Mead Johnson & Company
Source Address: State Highway 62 East, Mt. Vernon, Indiana 47620
Mailing Address: 2400 West Lloyd Expressway, Evansville, Indiana 47721
FESOP No.: F129-13970-00021

Months: _____ to _____ Year: _____

Page 1 of 2

This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Federally Enforceable State Operating Permit (FESOP) Renewal

Source Name: Mead Johnson & Company
Source Location: State Highway 62 East, Mt. Vernon, Indiana 47620
SIC Code: 2834
County: Posey
Operation Permit No.: F129-13970-00021
Permit Reviewer: Adeel Yousuf /EVP

On October 24, 2001, the Office of Air Quality (OAQ) had a notice published in the Mount Vernon Democrat in Mount Vernon, Indiana, stating that Mead Johnson & Company had applied for a Federally Enforceable State Operating Permit (FESOP) Renewal to operate a pharmaceutical packaging and research and development source. The notice also stated that OAQ proposed to issue a FESOP Renewal for this operation and provided information on how the public could review the proposed FESOP Renewal and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this FESOP Renewal should be issued as proposed.

Upon further review, the OAQ has decided to make the following changes to the FESOP Renewal. Bolded language has been added and the language with a line through it has been deleted.

1. Condition C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]
Condition C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]
Condition C.5 Fugitive Dust Emissions [326 IAC 6-4]
Condition C.7 Stack Height [326 IAC 1-7]
Condition D.1.2 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1] [326 IAC 7-2-1]

Conditions C.3, C.4, C.5, C.7 and D.1.2 were modified by removing language stating that the condition was not federally enforceable. Federal law states that failure to comply with any permit condition issued under a program that has been approved into a State Implementation Plan (SIP) is to be treated as a violation of the SIP (40 CFR 52.23). This has the effect of making all FESOP conditions federally enforceable. Indiana's FESOP program was approved as a part of Indiana's SIP at 40 CFR 52.788. Neither the program nor the underlying rule, 326 IAC 2-8 contains provisions for designating certain conditions as not federally enforceable, therefore, the following statements with a strike out have been removed from the FESOP permit.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. ~~326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.~~

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2. ~~326 IAC 9-1-2 is not federally enforceable.~~

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). ~~326 IAC 6-4-2(4) is not federally enforceable.~~

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. ~~The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(e) and (d), 326 IAC 1-7-4(d)(3), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.~~

D.1.2 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1] [326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations) the SO₂ emissions from the boilers S-1 and S-2, each rated at 30.64 MMBtu/hr, shall not exceed five tenths (0.5) pounds per MMBtu heat input. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a thirty (30) day rolling weighted average. ~~326 IAC 7-1.1 and 326 IAC 7-2-1 are not federally enforceable.~~

2. Condition B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

The IDEM, OAQ, has revised Condition B.15 Deviations from Permit Requirements and Conditions and certain Parametric Monitoring conditions in the D section of the permit to address concerns regarding the independent enforceability of permit conditions [see 40 CFR 70.6(a)(6)(i)]. The Parametric Monitoring conditions have been revised to establish normal operating conditions for the emission unit or control device and to require implementation of the compliance response plan when monitoring indicates operation is outside the normal range. Language that inferred that operating outside of the normal range could be considered by itself to be a deviation was removed. B.15 was revised to remove language that could be considered to grant exemptions from permit requirements and to clarify reporting obligations.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. ~~Deviations that are required to be reported by an applicable requirement~~ **A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit**, shall be reported according to the schedule stated in the applicable requirement and ~~do~~ **does** not need to be included in this report.

~~The notification by the Permittee~~ **Quarterly Deviation and Compliance Monitoring Report** does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit ~~or a rule. It does not include:~~

- ~~(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or~~
- ~~(2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.~~
- ~~A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.~~

- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

3. Condition C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]
Condition C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4]
[326 IAC 2-8-5]

IDEM, OAQ has revised C.8 Asbestos Abatement Projects to clarify that the asbestos notification does not require a certification by the responsible official, but it does need to be certified by the owner or operator. IDEM, OAQ has revised C.16 Actions Related to Noncompliance Demonstrated by a Stack Test; a certification by the responsible official is required for the notification sent in response to non-compliance with a stack test.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
- (A) Asbestos removal or demolition start date;
- (B) Removal or demolition contractor; or
- (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4]
[326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do ~~not~~ require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

4. C.15 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5]

The IDEM, OAQ has restructured C.15 to clarify the contents and implementation of the compliance response plan. The name of the condition has been changed to better reflect the contents of the condition. The language regarding the OAQ's discretion to excuse failure to perform monitoring under certain conditions has been deleted. The OAQ retains this discretion to excuse minor incidents of missing data; however, it is not necessary to state criteria regarding the exercise of that discretion in the permit. In (c)(2) "administrative amendment" has been revised to "minor permit modification," because 326 IAC 2-7-11(a)(7) has been repealed. Requests that do not involve significant changes to monitoring, reporting, or recordkeeping requirements may now be approved as minor permit modifications.

C.15 **Compliance Monitoring Response Plan - Failure to Take Response Steps Preparation, Implementation, Records, and Reports** [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) The Permittee is required to **prepare** ~~implement: a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:~~
- ~~_____ (1) This condition;~~
 - ~~_____ (2) The Compliance Determination Requirements in Section D of this permit;~~
 - ~~_____ (3) The Compliance Monitoring Requirements in Section D of this permit;~~
 - ~~_____ (4) The Record Keeping and Reporting Requirements in Section C (General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and~~
 - ~~(5) A~~ **a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, and maintained on site, and is comprised of:**
 - (A)(1) Reasonable response steps that may be implemented in the event that compliance-related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and an expected timeframe for taking reasonable response steps.**
 - (B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.**

- (2) **If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.**
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition **as follows:** ~~Failure to take reasonable response steps may constitute a violation of the permit.~~
- (1) **Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or**
- (2) **If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.**
- (c) **If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.**
- (d) **Failure to take reasonable response steps shall constitute a violation of the permit.**
- (c) ~~Upon investigation of a compliance monitoring excursion, the~~ **The** Permittee is ~~excused from taking~~ **not required to take any** further response steps for any of the following reasons:
- (1) A false reading occurs due to the malfunction of the monitoring equipment **and** ~~This shall be an excuse from taking further response steps providing that~~ prompt action was taken to correct the monitoring equipment.
- (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.
- (3) An automatic measurement was taken when the process was not operating.
- (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

- (d) **When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B- Deviations from Permit Requirements and Conditions.**
- ~~(d)~~(e) ~~Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken.~~ **The Permittee shall record all instances when response steps are taken.** In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.
- ~~(e)~~(f) **Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed at all times when the equipment emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.** ~~If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.~~
- (f) ~~At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.~~

Condition D.1.5 has been revised to reflect the Condition C.15 title change.

D.1.5 Visible Emissions Notations

- (a) Visible emission notations of the boilers S-1 and S-2 stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere and while combusting fuel oil. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance ~~Monitoring~~ **Response Plan - Failure to Take Response Steps Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

5. Condition A.5 Prior Permit Conditions

Condition A.5 Prior Permit Conditions was removed and a new Condition Prior Permit Superseded was added to the permit to implement the intent of the new rule 326 IAC 2-1.1-9.5.

~~A.5 Prior Permit Conditions~~

- ~~(a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.~~
- ~~(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.~~

A.5 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either**
 - (1) incorporated as originally stated,**
 - (2) revised, or**
 - (3) deleted****by this permit.**
- (b) All previous registrations and permits are superseded by this permit.**

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Federally Enforceable Operating Permit (FESOP) Renewal

Source Background and Description

Source Name: Mead Johnson & Company
Source Location: State Highway 62 East, Mt. Vernon, Indiana, 47620
County: Posey
SIC Code: 2834
Operation Permit No.: F129-13970-00021
Permit Reviewer: Adeel Yousuf / EVP

The Office of Air Quality (OAQ) has reviewed a FESOP renewal application from Mead Johnson & Company relating to the operation of a stationary pharmaceutical packaging and research and development source. Mead Johnson & Company was issued FESOP (129-5036-00021) on December 11, 1996 that will expire on December 11, 2001.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

- (a) Two (2) natural gas fired boilers installed in 1970, identified as S-1 and S-2, each with a maximum heat input rate of 30.64 million (MM) British thermal units (Btu) per hour, and exhausting through stacks S-1 and S-2, respectively. Boilers S-1 and S-2 use No. 2 fuel oil as back-up fuel.
- (b) One (1) natural gas fired incinerator, installed in 1997, and identified as S-4, with maximum heat input capacity of 1.5 MMBtu/hr and a maximum process capacity of 250 lbs/hr, and exhausting through stack S-4.

Note: One natural gas fired boiler, identified as S-8 and permitted under First Minor Permit Modification (SMF 129-8570) is not included in this FESOP Renewal. The source never constructed the boiler (S-8) and will not construct it in the future.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (1) The following VOC storage containers:
 - (a) One (1) 1,130 gallon aboveground storage tank containing gasoline.
 - (b) One (1) 1,130 gallon aboveground storage tank containing diesel fuel.
 - (c) One (1) 300 gallon aboveground storage tank containing diesel fuel.

- (d) One (1) 250 gallon aboveground storage tank containing diesel fuel.
- (2) Other categories with emissions below insignificant thresholds:
 - (a) Two (2) dry material mixing units identified as S-9 and S-10, each controlled by a baghouse for PM control, identified as DC-1, and exhausting through one (1) stack SV-9.
 - (b) Two (2) dry weighing units identified as S-11 (1107) and S-12 (1108), each controlled by a baghouse for PM control, identified as DC-1, and exhausting through one (1) stack SV-9.
 - (c) Four (4) core pressing units identified as S-16 (1106), S-13 (1109), S-14 (1111), and S-15 (1113), each controlled by a baghouse for PM control, identified as DC-2, and exhausting through one (1) stack SV-10.
 - (d) Three (3) core pressing units identified as S-17 (1122), S-18 (1121), and S-19 (1120), each controlled by a baghouse for PM control, identified as DC-1, and exhausting through one (1) stack SV-9.
 - (e) One (1) coating unit for dry tablets from facilities S-16 (1106), S-13 (1109), S-14 (1111), and S-15 (1113), identified as S-20 (1112), utilizing two (2) coating pans, controlled by a baghouse for PM control, identified as DC-12001 and DC-12201, and exhausting through two (2) stacks SV-11 and SV-12.
 - (f) One (1) coating unit for dry tablets from facilities S-17 (1122), S-18 (1121), and S-19 (1120), identified as S-21 (1125), utilizing one (1) coating pan, controlled by a baghouse for PM control, identified as DC-20601, and exhausting through one (1) stack SV-13.
 - (g) One (1) coating unit for dry tablets from facilities S-17 (1122), S-18 (1121), and S-19 (1120), identified as S-22 (1124), utilizing one (1) coating pan, controlled by a baghouse for PM control, identified as DC-20801, and exhausting through one (1) stack SV-14.
 - (h) One (1) coating unit for dry tablets from facilities S-17 (1122), S-18 (1121), and S-19 (1120), identified as S-23 (1117), utilizing one (1) coating pan, controlled by a baghouse for PM control, identified as DC-21001, and exhausting through one (1) stack SV-15.
 - (i) One (1) coating unit for dry tablets from facilities S-17 (1122), S-18 (1121), and S-19 (1120), identified as S-24 (1119), utilizing one (1) coating pan, controlled by a baghouse for PM control, identified as DC-8, and exhausting through one (1) stack SV-16.
 - (j) One (1) coating unit for dry tablets from facilities S-17 (1122), S-18 (1121), and S-19 (1120), identified as S-25 (1123), utilizing one (1) coating pan, controlled by a baghouse for PM control, identified as DC-9, and exhausting through one (1) stack SV-17.

Note: All of the above weighing, mixing, pressing and coating operations ((a) through (i)) were reviewed as significant activities under original FESOP 129-5036-00021. These operations are determined to be insignificant activities during this FESOP renewal process, due to the fact that the potential PM and PM-10 emissions from each of the unit is less than 5 pounds per hour.

- (k) Cold solvent cleaning station (2 square feet).
 - (l) Cold solvent cleaning station (3.75 square feet).
 - (m) Light vehicle traffic on paved roads.
 - (n) Powder mixing cabinets.
 - (o) Pharmaceutical packaging lines with rotoclone.
 - (p) Research and development operations.
 - (q) One granulator unit for wet granulation.
- (3) Emergency generators as follows:
Two (2) emergency diesel powered generators, identified as S-3 and S-7, with heat input capacities of 4.4 and 0.7 MMBtu/hr, and exhausting through stacks S-3 and S-7, respectively.

Note: Emergency Generators (S-3 and S-7) are included as significant activities in FESOP 129-5036-00021 with potential emissions evaluated at 8760 hours per year of operation. The source has confirmed that these generators are used for emergencies only, and the potential emissions are evaluated in this renewal at 500 hours per year of potential operation.

Existing Approvals

- (a) FESOP 129-5036-00021, issued on December 11, 1996; and expires on December 11, 2001.
- (b) First Significant Permit Modification 129-8570-00021, issued on October 2, 1997.
- (c) Second Significant Permit Modification 129-9060-00021, issued on March 6, 1998.

All conditions from previous approvals were incorporated into this FESOP except the following:

- (a) FESOP 129-5036-00021, issued on December 11, 1996.

Conditions: D.2.1 through D.2.4 (Entire D.2 section)

Reason not incorporated: Section D.2 contains two (2) diesel fueled generators of the original FESOP, identified as S-3 and S-7. These two (2) generators are used for emergencies only and do not qualify as significant activities (as reviewed in original FESOP 129-5036). During this FESOP renewal process, generators S-3 and S-7 are considered to be insignificant activities, thus the potential emissions from these generators are evaluated at 500 hours per year of

operation (as oppose to 8760 hours per year of operation used in the original FESOP permit).

- (b) First Significant Permit Modification 129-8570-00021, issued on October 2, 1997.

Conditions: D.4.1 through D.4.15 (Entire D.4 section)

Reason not incorporated: Section D.4 pertains to the one (1) natural gas fired boiler, identified as boiler S-8. The source never constructed the boiler S-8 and it will not be constructed in the future, all reference to this facility, including related section D.4, and obsolete and removed from this FESOP.

- (c) First Significant Permit Modification 129-5036-00021, issued on October 2, 1997.

Conditions:

- (1) D.1.2a Nitrogen Oxides (NO_x)
Pursuant to 326 IAC 2-8-4, the input of natural gas fuel and natural gas fuel equivalent to the two (2) 30.64 MMBtu per hour boilers, plus the 31.5 MMBtu per hour boiler S-8 listed under Section D.4, shall be limited as follows:
- (a) Total input shall not exceed 45.71 million cubic feet of natural gas on a fixed monthly basis. This limitation is equivalent to total NO_x emissions of 3.2 tons per month.
 - (b) For the purposes of determining compliance, the natural gas fuel equivalent as No. 2 fuel oil is calculated based on 7,000 gallons of No. 2 fuel oil per million cubic feet of natural gas burned.
 - (c) This fuel usage limitation will satisfy the requirements of 326 IAC 2-8-4. Therefore, the requirements of 326 IAC 2-7 do not apply. This limitation will also satisfy the requirements of 326 IAC 2-2 and 326 IAC 2-3.
- (2) D.3.1(a) Nitrogen Oxide (NO_x)
Pursuant to 326 IAC 2-8 (FESOP), the waste disposed in this 1.0 MMBtu per hour incinerator, shall be limited to a monthly charge rate of 44.77 tons per month. This limitation is equivalent to NO_x emissions of 0.066 tons per month.

Reason not incorporated: Nitrogen Oxide limits are no longer required due to the following reasons:

- 1) Boiler S-8 is not included in this FESOP renewal because it was never constructed at the source and will not be constructed in the future.
- 2) Two diesel fueled generators S-3 and S-7, as emergency generators, have potential emissions evaluated at 500 hours per year of operation. This is significantly lower than the potential emissions calculated in the original FESOP based on 8760 hours per year of operation. Potential uncontrolled NO_x emissions from the two boilers (S-1 and S-2) and the incinerator (S-4) equal to 38.34 and 0.8 tons of NO_x per year, respectively. Thus, the source wide NO_x emissions will be limited to less

than 100 TPY and the source will comply with 326 IAC 2-8 (FESOP) with no NOx emission limit for the incinerator (S-4) nor fuel input limits for the two boilers (S-1 and S-2). The incinerator charge rate will still be limited to 44.77 tons per month to comply with HAPs emission limits.

- (d) Second Significant Permit Modification 129-9060-00021, issued on March 6, 1998.

Conditions: D.5.10 through D.5.13

Compliance Monitoring Requirements for mixing, weighing, pressing and coating operations (S-9 through S-25)

D.5.10 Visible Emissions Notation

D.5.11 Baghouse Inspections

D.5.12 Broken Bag or failure Detection

D.5.13 Record Keeping Requirements

Reason not incorporated:

Mixing, weighing, pressing and coating units (S-9 through S-25) were permitted as significant activities in FESOP 129-5036-00021. However, during this FESOP renewal permit review these units with potential PM and PM-10 emissions less than 5 pounds per hour are classified as insignificant activities. Compliance monitoring requirements do not apply to these controlled facilities whose allowable PM emission rates are well below 10 pounds per hour.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the FESOP Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP Renewal application for the purposes of this review was received on February 28, 2001. Additional information was received on August 30, 2001.

There was no notice of completeness letter mailed to the source.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (eight (8) pages).

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source, excluding the emission limits that were contained in the previous FESOP.

Pollutant	Unrestricted Potential Emissions (tons/yr)
PM	67.16
PM-10	67.16
SO ₂	83.42
VOC	3.24
CO	29.12
NO _x	44.21

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Unrestricted Potential Emissions (tons/yr)
Lead	0.039
Hydrochloric Acid	18.34
Mercury	0.058
Hydrogen Fluoride	0.082
Chlorine	0.082
TOTAL	18.60

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is equal to or greater than ten (10) tons per year or the potential to emit (as defined in 326 IAC 2-1.1-1(16)) of a combination HAPs is greater than or equal to twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD and Emission Offset applicability.

Potential to Emit After Issuance

The source, issued a FESOP on December 11, 1996, has opted to remain a FESOP source, rather than apply for a Part 70 Operating Permit. The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered enforceable only after issuance of this Federally Enforceable State Operating Permit and only to the extent that the effect of the control equipment is made practically enforceable in the permit. Since the source has not constructed any new emission units, the source's potential to emit is based on the emission units included in the original FESOP. (F129-5036-00021; issued on December 11, 1996).

	Potential to Emit After Issuance (tons/year)						
Process/emission unit	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Boilers S-1 and S-2 ⁽⁴⁾	3.83	3.83	81.67	1.48	22.55	38.34	Negl.
Incinerator (S-4)	1.90	1.90	0.70	0.80	2.70	0.80	9.1 (total) 9.0 (Single)
Mixing, Weighing, Pressing and Coating Facilities (S-9 thru S- 25) ⁽²⁾	59.38 ⁽¹⁾	59.38 ⁽¹⁾	--	--	--	--	--
Emergency Generators (S-3 and S-7) ⁽²⁾	0.15	0.15	0.35	0.16	1.07	4.27	Negl.
Insignificant Activities	Negl.	Negl.	--	Negl.	--	--	--
Total PTE After Issuance	65.26 ⁽³⁾	65.26 ⁽³⁾	82.72 ⁽³⁾	2.44 ⁽³⁾	26.32 ⁽³⁾	43.41 ⁽³⁾	9.1 (total) 9.0 (Single)

Notes:

1) Reflects the potential to emit, which less than the 326 IAC 6-3-2 allowable (lb/hr) emission rate extrapolated to an equivalent annual rate assuming 8760 hours of operation. PM10 conservatively set equal to PM.

2) Insignificant Activity

3) PTE after issuance for this renewal is different than the PTE in the original FESOP 129-5036-00021, because the emergency generators are considered insignificant activities during this FESOP renewal review process, with potential emissions based on 500 hours per year of operation. These emergency generators were considered significant activities in the original FESOP.

4) Boilers S-1 and S-2 use natural gas as the primary fuel and # 2 fuel oil as back up fuel. The total represents worst case emissions for each pollutant.

County Attainment Status

The source is located in Posey County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Posey County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

There are no new federal rules applicable to the source during this FESOP renewal review process. The applicability determination that follows is based on that conducted for the original FESOP F129-5036-00021, issued on December 11, 1996.

- (a) Two (2) boilers (S-1 and S-2) constructed in 1970, each rated at 30.64 MMBtu per hour, are not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.40c, Subpart Dc) because both were constructed prior to the rule applicability date of June 9, 1989.
- (b) The three (3) diesel fuel and one (1) gasoline storage tanks, identified as insignificant activities at this facility are not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.112b, Subpart Kb), because the capacities of each of the aboveground tanks are less than 40 cubic meters.
- (c) The one (1) natural gas fired incinerator (S-4) with maximum heat input rate of 1.5 MMBtu/hr and maximum charge capacity of 250 pounds per hour, is still not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60.50, Subpart E) because the maximum charge capacity of this incinerator is below the rule applicability threshold of 50 tons per day.
- (d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

State Rule Applicability - Entire Source

There are no new state rules applicable to the entire source during this FESOP renewal review process. The applicability determination that follows is based on that conducted from the original FESOP F129-5036-00021, issued on December 11, 1996.

326 IAC 2-6 (Emission Reporting)

This source is located in Posey County which is not one of the specifically listed counties, nor does the source have the potential to emit CO, VOC, NO_x, PM₁₀ (including fugitive emissions), or SO₂ in amounts at or exceeding 100 tons per year. The potential to emit of all other regulated pollutants is less than 100 tons per year. Therefore, 326 IAC 2-6 does not apply.

326 IAC 2-4.1-1 (New Source Toxics Control)

This source is not subject to 326 IAC 2-4.1-1 (New Source Toxics Control) because no new or reconstructed facilities with a PTE of any single HAP at 10 tons per year or 25 tons per year of the combination HAPs have been installed since July 27, 1997. Therefore, 326 IAC 2-4.1-1 does not apply.

326 IAC 2-8-4 (FESOP)

Pursuant to 326 IAC 2-8, the incinerator charge capacity shall not exceed 537.29 tons per twelve (12) consecutive month period. Compliance with this production limit shall limit source wide single HAP (as Hydrochloric acid, HCl) and total HAPs emissions to less than 10 and 25 tons per twelve (12) consecutive month period, respectively. Therefore the requirements of 326 IAC 2-7 do not apply.

Note: FESOP 129-5036 and SMF 129-8570 limited the source wide NO_x and SO₂ emissions to 98.9 and 90.4, respectively, as follows:

- (a) *Pursuant to FESOP 129-5036-00021, the NO_x emissions for emergency generator S-3 are limited to 3.85 tons per month and the fuel usage limit is 17,985.5 gallons per month.*

- (b) Pursuant to First Significant Permit Modification 129-8570-00021, the combined input of natural gas and natural gas equivalent (as No. 2 distillate fuel oil) to the 31.5 MMBtu per hour boiler S-8 and the two (2) 30.64 MMBtu per hour boilers S-1 and S-2 is limited to 45.71 million cubic feet on a fixed monthly basis.

The above PTE limits were calculated based on the emergency generator operating 8760 hours per year. These limits are no longer required as the emergency generators are considered insignificant activities during this FESOP renewal process and potential emissions are calculated based on 500 hours per year of operation. Also, boiler S-8 is not included herein as it was never constructed at the source. Consequently, no natural gas usage limit is required for the boilers S-1 and S-2 as the source will satisfy the requirements of FESOP (326 IAC 2-8) with out limiting fuel input to the two boilers (S-1 and S-2).

326 IAC 5-1 (Visible Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating)

The two (2) natural gas fired boilers (S-1 and S-2), each with a maximum capacity of 30.64 MMBtu/hr and constructed in 1970, are subject to the particulate matter limitations of 326 IAC 6-2. Pursuant to this rule, particulate emissions from indirect heating facilities constructed prior to September 21, 1983, shall be limited by the following equation:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

where

C = 50 u/m³
Pt = emission rate limit (lbs/mmBtu)
Q = total source heat input capacity (mmBtu/hr)
N = number of stacks
a = plume rise factor (0.67)
h = stack height in feet. If a number of stacks of different heights exist, average stack height to represent "N" stacks shall be calculated by weighing each stack height with its particulate matter emission rate as follows:

$$h = \frac{\sum_{i=1}^N H_i \times p_{a_i} \times Q_i}{N}$$

$$\sum_{i=1}^3 p_i \times Q_i$$

where: P_a = the actual controlled emissions rate in lb/mmBtu using the emission factor from AP-42 or stack test data. Stacks constructed after January 1, 1971, shall be credited with GEP stack height only. GEP stack height shall be calculated as specified in 326 IAC 1-7.

For boilers S-1 and S-2, both constructed before 1972 ($Q = 30.64 + 30.64 = 61.28$ mmBtu/hr)
 $P_t = (50 \times 0.67 \times 36) / (76.5 \times 61.28^{0.75} \times 2^{0.25}) = 0.60$ lbs PM/mmBtu

Compliance calculation:

$(3.83 \text{ tons PM/yr}) \times (\text{hr}/61.28 \text{ MMBtu}) \times (\text{yr}/8,760 \text{ hrs}) \times (2,000 \text{ lbs/ton}) = 0.0142 \text{ lbs PM/MMBtu}$

Actual lbs PM/MMBtu (0.0142) is less than allowable lbs PM/MMBtu (0.60), therefore the boilers will comply with the requirements of 326 IAC 6-2-3 (see Appendix A, page 3 of 8).

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

The two (2) natural gas-fired boilers (S-1 and S-2) using No. 2 fuel oil as back-up fuel are subject to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations). Pursuant to 326 IAC 7-1.1-2, sulfur dioxide emissions from the two (2) boilers using No. 2 fuel oil shall be limited to 0.5 pounds per million BTU heat input when using No. 2 fuel oil. This equates to a fuel oil sulfur content limit of 0.50%. The facility will comply with this rule by limiting distillate oil sulfur content to 0.3% or less.

326 IAC 7-2-1 (Sulfur Dioxide Reporting Requirements)

Pursuant to this rule, the source shall submit reports of calendar month average sulfur content, heat content, fuel consumption, and sulfur dioxide emission rate (pounds SO_2 per MMBtu), to the OAQ upon request.

326 IAC 4-2-1 (Incinerators)

The natural gas fired incinerator, rated at 1.5 MMBtu/hr, is subject to the requirements of 326 IAC 4-2-1. Pursuant to this rule, the incinerator shall:

- (a) consist of primary and secondary chambers or the equivalent;
- (b) be equipped with a primary burner unless burning wood products;
- (c) comply with 326 IAC 5-1 and 326 IAC 2;
- (d) be maintained properly as specified by the manufacturer and approved by the commissioner;
- (e) be operated according to the manufacturer's recommendations and only burn waste approved by the commissioner;
- (f) comply with other state and/or local rules or ordinances regarding installation and operation of incinerators;
- (g) be operated so that emissions of hazardous material including, but not limited to, viable pathogenic bacteria, dangerous chemicals or gases, or noxious odors are prevented;

- (h) not emit particulate matter in excess of five-tenths (0.5) pounds of particulate matter per one thousand (1,000) pounds of dry exhaust gas at standard conditions corrected to fifty percent (50%) excess air; and
- (i) not create a nuisance or a fire hazard.

If any of the above result, the burning shall be terminated immediately.

The incinerator has a maximum exhaust rate of 0.076 pounds of PM per 1000 pounds of dry exhaust gas, corrected to fifty percent (50%) excess air (see Appendix A, page 9 of 9). Therefore, the incinerator is in compliance with this rule.

326 IAC 6-3-2 (Process Operations)

The particulate matter (PM) emissions from the following processes shall be limited by the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Emission Unit	Process Weight Rate (lb/hr)	Uncontrolled PM Emissions (lb/hr)	Control Efficiency %	Controlled PM Emissions (lb/hr)	Allowable PM Emissions (326 IAC 6-3-2) (lb/hr)
S-9 (Pharmacy A)	693	2.50	95	0.125	2.01
S-10 (Pharmacy B)	926	3.34	95	0.167	2.45
S-11 (Weigh room 1107)	10**	0.0091	95	4.45E-4	0.551
S-12 (Weigh room 1108)	45.3**	0.045	95	2.25E-3	0.551
S-13 (Press room 1109) S-14 (Press room 1111) S-15 (Press room 1113) S-16 (Press room 1106)	901*	3.51	95	0.175	2.40
S-17 (Press room 1122)	261	1.02	95	0.051	1.04
S-18 (Press room 1121)	235	0.92	95	0.046	0.97
S-19 (Press room 1120)	179	0.70	95	0.035	0.81
S-20 (Coating room 1112)	874	0.87	95	0.043	2.35
S-21 (Coating room 1125) S-22 (Coating room 1124) S-23 (Coating room 1117) S-24 (Coating room 1119) S-25 (Coating room 1123)	654*	0.65	95	0.032	1.94

* Reflects the one combined process weight rate for all the listed units.

** Particulate matter emissions for processes with process weight rate of equal to or less than 100 lb/hr are limited to 0.551 lbs/hr

The Baghouses (DC-1, DC-2, DC-12001, DC-12201, DC-20601, DC-20801, DC-21001, DC-8, and DC-9) shall be in operation at all times the facilities (S-9 through S-24) are in operation, in order to comply with this limit.

There will be no compliance monitoring condition inserted into the permit since these controlled facilities (i.e., S-9 through S-24) have allowable emissions that do not exceed 10 pounds per hour.

326 IAC 9-1-2 (Carbon Monoxide Emissions)

Pursuant to 326 IAC 9-1-2, the Permittee shall not cause or allow the discharge of carbon monoxide from the one (1) solid waste incinerator, unless the waste gas stream is burned in a direct flame afterburner or is controlled by other means approved by IDEM, OAQ.

The incinerator is a multiple chamber incinerator using a natural gas fired burner in the secondary chamber. Therefore, the incinerator is in compliance with this rule.

Testing Requirements

The following testing requirements from previous approvals were not incorporated into this FESOP:

- (a) SMF 129-8570-00021, issued on October 2, 1997;

Testing Requirements for boiler S-8:

- (1) Condition D.4.11(a) Sulfur Dioxide Emission and Sulfur Content (pursuant to 40 CFR 60, Subpart Dc, and 40 CFR 60.8)
- (2) Condition D.4.11(b) Opacity (The Permittee shall demonstrate initial compliance for opacity during No. 2 distillate fuel oil firing at the boiler S-8 exhaust stack)

Reason not incorporated:	Testing requirements for boiler S-8 are not incorporated in this FESOP because the boiler is not in operation at the source. Boiler S-8, permitted under SMF 129-8570, was never constructed and will not be constructed in the future.
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Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

All compliance requirements from previous approvals were incorporated into this FESOP except the following:

Reason not incorporated: Compliance Monitoring Requirements for Boiler S-8 (permitted under SMF 129-8570-00021, issued on October 2, 1997) were not incorporated into this FESOP because the boiler is not in operation at the source. Boiler S-8 was never constructed and will not be constructed in the future.

Reason not incorporated: Mixing, weighing, pressing and coating units (S-9 thru S-25) were permitted as significant activities in FESOP 129-5036-00021. However, during this FESOP renewal permit review these units (with potential PM and PM-10 emissions less than 5 pounds per hour) are classified as insignificant activities. Compliance monitoring requirements do not apply to these controlled facilities whose allowable PM emission rates are well below 10 pounds per hour.

1. The two (2) boilers (Boiler S-1 and Boiler S-2) have applicable compliance monitoring conditions as specified below:
 - (a) Visible emission notations of the boilers S-1 and S-2 stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

These monitoring conditions are necessary because the two (2) boilers (Boiler S-1 and Boiler S-2) must operate properly to ensure compliance with 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating) and 326 IAC 2-8 (FESOP).

Conclusion

The operation of this pharmaceutical packaging and research and development source shall be subject to the conditions of the attached proposed **FESOP No.: F129-13970-00021**.

Appendix A: Emission Calculations

Company Name: Mead Johnson & Company
Address City IN Zip: State Highway 62 East, Mt. Vernon, Indiana
FESOP Renewal No.: 129-13970
Plt ID: 129-00021
Reviewer: Adeel Yousuf / EVP

Uncontrolled Potential Emissions (tons/year)							
Emissions Generating Activity							
Pollutant	Mixing, Weighing, Pressing, and Coating Facilities	Natural Gas Combustion Boilers S-1 and S-2	No. 2 Oil Combustion Boilers S-1 and S-2	Emergency Generators Diesel Combustion	Incinerator	Insignificant Activities	TOTAL**
PM	59.38	0.51	3.83	0.15	3.80	negl.	67.16
PM10	59.38	2.04	3.83	0.15	3.80	negl.	67.16
SO2	0.00	0.16	81.67	0.35	1.40	0.00	83.42
NOx	0.00	26.84	38.34	4.27	1.60	0.00	44.21
VOC	0.00	1.48	0.38	0.16	1.60	negl.	3.24
CO	0.00	22.55	9.59	1.07	5.50	0.00	29.12
total HAPs	0.00	0.00	0.00	0.00	18.61	0.00	18.61
worst case single HAP	0.00	0.00	0.00	0.00	(HCl) 18.34	0.00	(HCl) 18.34
Total emissions based on rated capacity at 8,760 hours/year.							
**Boilers 1 and 2 use natural gas as the primary fuel and # 2 fuel oil as back up fuel. The total represents the worst case emissions for each pollutant							
Controlled Potential Emissions (tons/year)							
Emissions Generating Activity							
Pollutant	Mixing, Weighing, Pressing, and Coating Facilities	Natural Gas Combustion Boilers S-1 and S-2	No. 2 Oil Combustion Boilers S-1 and S-2	Emergency Generators Diesel Combustion	Incinerator*	Insignificant Activities	TOTAL**
PM	2.97	0.51	3.83	0.15	1.90	negl.	8.85
PM10	2.97	2.04	3.83	0.15	1.90	negl.	8.85
SO2	0.00	0.16	81.67	0.35	0.70	0.00	82.72
NOx	0.00	26.84	38.34	4.27	0.80	0.00	43.41
VOC	0.00	1.48	0.38	0.16	0.80	negl.	2.44
CO	0.00	22.55	9.59	1.07	2.70	0.00	26.32
total HAPs	0.00	0.00	0.00	0.00	9.13	0.00	9.13
worst case single HAP	0.00	0.00	0.00	0.00	(HCl) 8.99	0.00	(HCl) 8.99

Total emissions based on rated capacity at 8,760 hours/year, after control.

* Incinerator controlled emissions are based on limited process capacity of 122.67 lbs/hr. This process limit was established under FESOP 129-5036-00021(issued on December 11, 1996) to limit the single HAP (HCl) emissions to less than 9 tons per year.

**Boilers 1 and 2 use natural gas as the primary fuel and # 2 fuel oil as back up fuel. The total represents the worst case emissions for each pollutant.

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Boiler S-1 and Boiler S-2

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Company Name: Mead Johnson & Company
Address City IN Zip: State Highway 62 East, Mt. Vernon, Indiana
FESOP Renewal No.: 129-13970
Plt ID: 129-00021
Reviewer: Adeel Yousuf / EVP

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

61.3

536.8

	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	0.6	100.0	5.5	84.0
				**see below		
Potential Emission in tons/yr	0.51	2.04	0.16	26.84	1.48	22.55

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Potential Emissions Calculations**No. 2 Fuel Oil Combustion Only****MM BTU/HR < 100****Boiler S-1 and S-2****Company Name: Mead Johnson & Company****Address City IN Zip: State Highway 62 East, Mt. Vernon, IN 47620****FESOP Renewal No.: 129-13970****Pit ID: 129-00021****Reviewer: Adeel Yousuf**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	kgals/year	S = Weight % Sulfur Limited	
61.28	536.8	3834.4	0.3	

Heat Input Capacity includes:

Two (2) natural gas fired boilers, each rated at 30.64 MMBtu/hr and using No. 2 fuel oil as a backup fuel.

	Pollutant					
	PM	PM 10	SO ₂	NO _x	VOC	CO
Emission Factor in lb/kgal (No. 2 fuel oil combustion)	2.0	2.0	142S	20.00	0.2	5.0
Potential Emissions burning No. 2 fuel oil, tons/yr	3.83	3.83	81.67	38.34	0.38	9.59

Methodology:

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for CO from natural gas combustion: Uncontrolled = 35, Low NO_x Burner = 61, Flue gas recirculation = 37

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors for natural gas combustion are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02

Emissions from natural gas combustion (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors for No. 2 fuel oil combustion are from AP 42, Tables 1.3-2 and 1.3-4 (SCC 1-02-005-01/02/03)

Emissions from No. 2 fuel oil combustion (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

Compliance with 326 IAC 7-1.1-2

The following calculations determine the maximum sulfur content of #2 distillate fuel allowed by 326 IAC 7-1-.1-2:

$$\begin{array}{rcl}
 0.5 \text{ lb/MMBtu} \times & 140,000 & \text{Btu/gal} = 70 \text{ lb/1000 gal} \\
 70 \text{ lb/1000 gal/} & 142 & \text{lb/1000 gal} = 0.50 \%
 \end{array}$$

Sulfur content must be less than or equal to 0.50 % to comply with 326 IAC 7-1.1-2.

FESOP No. F129-5036-00021, issued 12/11/96, limits #2 fuel oil sulfur content to: 0.30 %

Facility will comply with 326 IAC 7-1.1-2 by using fuel oil with a limited 0.30% sulfur content.

Appendix A: Emission Calculations
Internal Combustion Engines - Diesel Fuel
Turbine (>250 and <600 HP)
Reciprocating

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Company Name: Mead Johnson & Company
Address City IN Zip: State Highway 62 East, Mt. Vernon, Indiana
FESOP Renewal No.: 129-13970
Pit ID: 129-00021
Reviewer: Adeel Yousuf / EVP
Date: 08/31/2001

A. Emissions calculated based on heat input capacity (MMBtu/hr)

Heat Input Capacity
MM Btu/hr

0.7

One (1) emergency generator S-7, with heat input rate of 0.7 MMBtu/hr

Emission Factor in lb/MMBtu	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	0.31	0.31	0.29	4.41	0.4	0.95
Potential Emission in tons/yr	0.05	0.05	0.05	0.77	0.06	0.17

Methodology

Potential Throughput (hp-hr/yr) = hp * 500 hr/yr (for emergency generator)

Emission Factors are from AP42 (Supplement B 10/96), Table 3.3-2

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 8760 hr/yr / (2,000 lb/ton)

Emission (tons/yr) = [Potential Throughput (hp-hr/yr) x Emission Factor (lb/hp-hr)] / (2,000 lb/ton)

*PM emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

Appendix A: Emission Calculations
Internal Combustion Engines - Diesel Fuel
Turbine (>600 HP)

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Company Name: Mead Johnson & Company
Address City IN Zip: State Highway 62 East, Mt. Vernon, Indiana
FESOP Renewal No.: 129-13970
Plt ID: 129-00021
Reviewer: Adeel Yousuf / EVP
Date: 08/31/2001

A. Emissions calculated based on heat input capacity (MMBtu/hr)

Heat Input Capacity
MM Btu/hr

S= 0.3 = WEIGHT % SULFUR

4.4

One emergency generator S-7, with a heat input rate of 4.4 MMBtu/hr

Emission Factor in lb/MMBtu	Pollutant					
	PM*	PM10*	SO2	NOx	VOC	CO
	0.1	0.0573	0.3 (1.01S)	3.2 **see below	0.1	0.85
Potential Emission in tons/yr	0.1	0.1	0.3	3.5	0.1	0.9

**NOx emissions: uncontrolled = 3.2 lb/MMBtu, controlled with ignition timing retard = 1.9 lb/MMBtu

Methodology

Potential Throughput (hp-hr/yr) = hp * 500 hr/yr (Emergency generator)

Emission Factors are from AP 42 (Supplement B 10/96)Table 3.4-1 and Table 3.4-2

1 hp-hr = 7000 Btu, AP42 (Supplement B 10/96), Table 3.3-1, Footnote a.

Emission (tons/yr) = [Heat input rate (MMBtu/hr) x Emission Factor (lb/MMBtu)] * 8760 hr/yr / (2,000 lb/ton)

Emission (tons/yr) = [Potential Throughput (hp-hr/yr) x Emission Factor (lb/hp-hr)] / (2,000 lb/ton)

**Appendix A: Emission Calculations
Incinerator**

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Company Name: Mead Johnson & Company
Address City IN Zip: State Highway 62 East, Mt. Vernon, Indiana
FESOP Renewal No.: 129-13970
Plt ID: 129-00021
Reviewer: Adeel Yousuf / EVP
Date: 08/31/2001

	THROUGHPUT	THROUGHPUT
	lbs/hr	ton/yr
Potential	250	1095
Limited	122.67	537.29

	POLLUTANT				
	PM	SO2	CO	VOC	NOX
Emission Factor in lb/ton	7.0	2.5	10.0	3.0	3.0
Potential Emissions in ton/yr	3.8	1.4	5.5	1.6	1.6
Limited Emissions in ton/yr	1.9	0.7	2.7	0.8	0.8

Methodology

Emission factors are from AP 42 (5th Edition 1/95) Table 2.1-12, Uncontrolled emission factors for industrial/commercial refuse combustors, multiple chambers

Throughput (lb/hr) * 8760 hr/yr * ton/2000 lb = throughput (ton/yr)

Appendix A: Emission Calculations

Incinerator

HAPs Emissions

Company Name: **Mead Johnson & Company**
 Address City IN Zip: **State Highway 62 East, Mt. Vernon, Indiana**
 FESOP Renewal No.: **129-13970**
 Plt ID: **129-00021**
 Reviewer: **Adeel Yousuf / EVP**
 Date: **08/31/2001**

	THROUGHPUT	THROUGHPUT
	lbs/hr	ton/yr
Potential	250	1095
Limited	122.67	537.29

Pollutant (HAPs)	Emission Factor	Potential Throughput	Limited Throughput
	lbs/ton	tons/yr	tons/yr
Lead	0.0728	0.03986	0.01956
Hydrochloric Acid	33.5	18.34125	8.99968
PCBs	0.000047	0.00003	0.00001
Antimony	0.0128	0.00701	0.00344
Arsenic	0.000242	0.00013	0.00007
Beryllium	6.3E-06	0.00000	0.00000
Cadmium	0.00548	0.00300	0.00147
Chromium	0.000775	0.00042	0.00021
Manganese	0.000567	0.00031	0.00015
Mercury	0.107	0.05858	0.02875
Nickel	0.000567	0.00031	0.00015
Chlorine	0.149	0.08158	0.04003
Hydrofloric Acid	0.149	0.08158	0.04003
Dioxins	0.000021	0.00001	0.00001

Total HAPs	18.61407	9.13355
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Single Worst Case HAP (HCl)	18.34125	8.99968
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Methodology

Emission factors are from AP 42 (5th Edition 1/95) Table 2.3-3.

combustors, multiple chambers

Throughput (lb/hr) * 8760 hr/yr * ton/2000 lb = throughput (ton/yr)

Appendix A: Emission Calculations

Process

Particulate Matter Emissions

Company Name: Mead Johnson & Company
Address City IN Zip: State Highway 62 East, Mt. Vernon, Indiana
CP: 129-13970
Plt ID: 129-00021
Reviewer: Adeel Yousuf / EVP
Date: 09/10/2001

Particulate Matter Emissions from mixing, weighing, pressing, and coating facilities

Unit ID	Type of Process	Max. Process Weight Rate	Emission Factor	Source of	Potential Uncontrolled	Potential Uncontrolled	Potential Controlled
		lb/hr	lb PM / 2000 lb solids	Emission Factor *	PM Emissions	PM Emissions	PM Emissions
					lbs/hr	tons/yr	tons/yr
S-9 (Pharmacy A)	Dry material mixing unit	693	7.2	Stack test **	2.49	10.93	0.55
S-10 (Pharmacy B)	Dry material mixing unit	926	7.2	Stack test **	3.33	14.60	0.73
S-11 (Weigh room 1107)	Dry weighing unit	10	2.0	Engineering estimate	0.01	0.04	0.00
S-12 (Weigh room 1108)	Dry weighing unit	45.3	2.0	Engineering estimate	0.05	0.20	0.01
S-13 (Press room 1109), S-14 (1111), S-15 (1113), S-16 (1106)	Core pressing units	901	7.8	Stack test **	3.51	15.39	0.77
S-17 (Press room 1122)	Core pressing unit	261	7.8	Stack test **	1.02	4.46	0.22
S-18 (Press room 1121)	Core pressing unit	235	7.8	Stack test **	0.92	4.01	0.20
S-19 (Press room 1120)	Core pressing unit	179	7.8	Stack test **	0.70	3.06	0.15
S-20 (Coating room 1112)	Coating unit	874	2.0	Stack test **	0.87	3.83	0.19
S-21 (Coating room 1125), S-22 (1124), S-23 (1117), S-24 (1119), S-25 (1123)	Coating units	654	2.0	Stack test **	0.65	2.86	0.14
Total Max. Process Weight Rate (lb/hr)		4778.3					
Total Potential Uncontrolled PM Emissions (tons/yr)						59.38	
Total Potential Controlled PM Emissions (tons/yr)							2.97
		with baghouse control efficiency of 95%					

Methodology

Throughput (lb/hr) * EF (lb PM / 2000 lb solids) * 8760 hr/yr * ton/2000 lb = throughput (ton/yr)

* Emission factors are taken from SSPM 129-9060 issued on March 6, 1998 to FESOP 129-5036. These emission factors are provided by the source.

** Evansville Stack Test, 3/93

Appendix A: Emissions Calculations
Medical Waste Incinerator Compliance with 326 IAC 4-2-2

Company Name: Mead Johnson & Company
Address City IN Zip: State Highway 62 East, Mt. Vernon, Indiana
TV: 129-13970
Plt ID: 129-00021
Reviewer: Adeel Yousuf / EVP
Date: 09/28/2001

Potential PM emissions	0.43	lb/hr
Stack gas flow rate	2800.00	acfm
Gas temperature	900.00	deg F
Incinerator Throughput	122.67	lb/hr

Q_{std} = Volumetric flow rate at Standard Temperature

$$Q_{std} = 2800 \text{ acfm} \times \frac{529 \text{ deg R}}{2328} = 636.25 \text{ dscfm}$$

C_s = PM Concentration

$$C_s = \frac{0.43 \text{ lb/hr}}{636.25 \text{ dscfm}} \times \frac{7000 \text{ gr/lb}}{60 \text{ min/hr}} = 0.080 \text{ gr/dscf}$$

Corrected to 50% excess air

$$C_{s, \text{ corrected}} : 0.080 \text{ gr/dscf} \times \frac{(100+0)\%}{150\%} = 0.053 \text{ gr/dscf}$$

Ideal Gas Law

Specific Volume = $\frac{R \times T}{P \times Mw}$ where

R = gas constant = $\frac{21.9(\text{in Hg})(\text{ft}^3)}{(\text{lb mol})(\text{deg R})}$

T = standard temp = 529 deg R

P = standard pressure = 29.45 in Hg

Mw = avg molecular weight of air = 29 lb/lbmol

$$\text{Specific Volume} = 13.565 \text{ cf/lb air}$$

$$C_{s, \text{ corrected}} : 0.053 \text{ gr/dscf} \times 13.565 \text{ cf/lb air} = 0.720 \text{ gr/lb air}$$

$$0.720 \text{ gr/lb air} \times \frac{1}{7000} \text{ lb pm/gr} = 0.00010 \text{ lb PM/lb dry gas} = 0.1028 \text{ lb PM/1000 lb dry gas}$$

Maximum allowable particulate emission pursuant to 326 IAC 4-2-2 is 0.3 lb PM/1000 lb dry gas.

The medical waste incinerator is in compliance with 326 IAC 4-2-2.